Exhibit 5

Claim	Analysis
[7.1] A method of overwriting pre-overwrite data stored in a nonvolatile memory with post-overwrite data in which data is stored sector by sector, comprising:	To the extent preamble is limiting, ADATA Technology Co., Ltd. ("Defendant") performs and induces others to perform a method of overwriting pre-overwrite data stored in a nonvolatile memory with post-overwrite data in which data is stored sector by sector. This element is infringed literally, or in the alternative, under the doctrine of equivalents. For example, Defendant provides ADATA SU800 SSD[1] memory devices to read and write data stored therein. It makes use of Garbage Collection feature along with TRIM command to write to a memory block ("nonvolatile memory") that has already been used, ADATA SU800 SSD copies all valid data ("pre-overwrite data") and writes it to empty pages of a different memory block, erases all the data (both valid and invalid data) in the current block and then starts writing new data ("post-overwrite data") to the erased memory block.

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[1]While ADATA SU800 SSD has been used as an exemplary infringing product, SSD drives including but not limited to SU Series SSDs, SWORDFISH SSD, FALCON SSD, SPECTRIX Series SSDs, GAMMIX Series SSDs, SX Series SSDs, ISSS Series SSDs, IM2S Series SSDs, IM2P Series SSDs and/or IMSS Series SSDs, as well as variants (be it form factor or different storage capacity) and versions of these products have same functionality. The presently charted exemplary infringing product is representative for purposes of illustrating infringement of the other SSD drives.

Source: https://www.adata.com/il/specification/410?tab=description

Features

- 3D NAND Flash
- SMI Controller
- Wide capacity range: 128GB to 2TB
- Advanced hardware LDPC ECC Technology
- Intelligent SLC Caching and DRAM cache buffer
- DEVSLP (Device Sleep) support
- High TBW for extended drive longevity
- Supports S.M.A.R.T., TRIM Command, and NCQ
- Free software: SSD Toolbox and Migration Utility

Source:
https://webapi3.adata.com/storage/downloadfile/datasheet_su800_en_20210225.pdf,
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TRIM & Deallocation Commands

Flash storage devices typically cannot detect which pages contain data marked for deletion, causing them to erase and rewrite entire blocks during the garbage collection process. This results in blocks keeping invalid data for a long time instead of being erased sooner to be used for new writes. As more files are written on the flash storage device and there are fewer spare blocks to move data into, the device will have to wait for blocks to be erased before it can accept new data. This causes performance bottlenecks and the device slows down.

The TRIM command is an Advanced Technology Attachment (ATA) command available for flash storage devices using the Serial ATA (SATA) interface. For NVMe modules using the PCIe interface, the equivalent command is "Deallocate." TRIM and Deallocate complement garbage collection by notifying the flash storage device ahead of time which specific pages in a block may already be erased. The pages with invalid data are marked for deletion, valid data are moved to a free block, and the device is "permitted" to erase the block containing invalid data any time. This allows more blocks to be available for new data to be written in, and the storage device performs faster.

Source: https://www.atpinc.com/blog/how-trim-ssd-works-to-free-storage-space

	## Garbage Collection Helps SSDs Maintain Fast Read/Write Speeds The goal of garbage collection is to keep as many empty blocks as possible, so that when the SSD needs to write data, it can do so without waiting for a block to be erased. The SSD's controller looks for any pages that are no longer useful — pages that the operating system has marked as unnecessary (deleted data, modified data, and the like). It then moves useful pages to new blocks, leaving behind the old, unnecessary pages. The controller then erases the block so that it's ready for use. Source: https://datarecovery.com/rd/garbage-collection-ssd-simple-explanation/ Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Defendant.
[7.2] providing in a non-volatile memory a backup region and a data region having a plurality of data sectors in which a plurality of pre-overwrite data are stored, the backup region and data region being both provided in the	Defendant performs and induces others to perform providing in a non-volatile memory a backup region and a data region having a plurality of data sectors in which a plurality of pre-overwrite data are stored, the backup region and data region being both provided in the non-volatile memory. This element is infringed literally, or in the alternative, under the doctrine of equivalents. For example, Defendant's ADATA SU800 SSD provides a non-volatile memory comprising data sectors to store the data ("pre-overwrite data"). The non- volatile memory comprises two regions- first region ("data region") where all the new data is written provided the pre-existing data is erased and the second region ("backup region") where all the erased data from the first region is written using Garbage Collection and TRIM command.

non-volatile memory	
	Features ● 3D NAND Flash ● SMI Controller ● Wide capacity range: 128GB to 2TB ● Advanced hardware LDPC ECC Technology ● Intelligent SLC Caching and DRAM cache buffer ● DEVSLP (Device Sleep) support ● High TBW for extended drive longevity ● Supports S.M.A.R.T., TRIM Command, and NCQ ● Free software: SSD Toolbox and Migration Utility Source: https://webapi3.adata.com/storage/downloadfile/datasheet_su800_en_20210225.pdf, Page 1

TRIM & Deallocation Commands

Flash storage devices typically cannot detect which pages contain data marked for deletion, causing them to erase and rewrite entire blocks during the garbage collection process. This results in blocks keeping invalid data for a long time instead of being erased sooner to be used for new writes. As more files are written on the flash storage device and there are fewer spare blocks to move data into, the device will have to wait for blocks to be erased before it can accept new data. This causes performance bottlenecks and the device slows down.

The TRIM command is an Advanced Technology Attachment (ATA) command available for flash storage devices using the Serial ATA (SATA) interface. For NVMe modules using the PCIe interface, the equivalent command is "Deallocate." TRIM and Deallocate complement garbage collection by notifying the flash storage device ahead of time which specific pages in a block may already be erased. The pages with invalid data are marked for deletion, valid data are moved to a free block, and the device is "permitted" to erase the block containing invalid data any time. This allows more blocks to be available for new data to be written in, and the storage device performs faster.

Source: https://www.atpinc.com/blog/how-trim-ssd-works-to-free-storage-space

	## Garbage Collection Helps SSDs Maintain Fast Read/Write Speeds

The goal of garbage collection is to keep as many empty blocks as possible, so that when the SSD needs to write data, it can do so without waiting for a block to be erased.

The SSD's controller looks for any pages that are no longer useful — pages that the operating system has marked as unnecessary (deleted data, modified data, and the like). It then moves useful pages to new blocks, leaving behind the old, unnecessary pages. The controller then erases the block so that it's ready for use.

Source: https://datarecovery.com/rd/garbage-collection-ssd-simple-explanation/

Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Defendant. |
| [7.3] copying the pre-overwrite data stored in one of the data sectors along with an error detection code for the pre-overwrite data to the backup region; | Defendant performs and induces others to perform copying the pre-overwrite data stored in one of the data sectors along with an error detection code for the pre-overwrite data to the backup region.

This element is infringed literally, or in the alternative, under the doctrine of equivalents.

For example, Defendant's ADATA SU800 SSD uses Garbage Collection along with TRIM command which copies all valid data ("pre-overwrite data") and writes it to empty pages of a different memory block ("data sectors") of second region ("backup region") along with error correction code to detect and correct errors if any. |

Features

- 3D NAND Flash
- SMI Controller
- Wide capacity range: 128GB to 2TB
- Advanced hardware LDPC ECC Technology
- Intelligent SLC Caching and DRAM cache buffer
- DEVSLP (Device Sleep) support
- High TBW for extended drive longevity
- Supports S.M.A.R.T., TRIM Command, and NCQ
- Free software: SSD Toolbox and Migration Utility

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https://webapi3.adata.com/storage/downloadfile/datasheet_su800_en_20210225.pdf,
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TRIM & Deallocation Commands

Flash storage devices typically cannot detect which pages contain data marked for deletion, causing them to erase and rewrite entire blocks during the garbage collection process. This results in blocks keeping invalid data for a long time instead of being erased sooner to be used for new writes. As more files are written on the flash storage device and there are fewer spare blocks to move data into, the device will have to wait for blocks to be erased before it can accept new data. This causes performance bottlenecks and the device slows down.

The TRIM command is an Advanced Technology Attachment (ATA) command available for flash storage devices using the Serial ATA (SATA) interface. For NVMe modules using the PCIe interface, the equivalent command is "Deallocate." TRIM and Deallocate complement garbage collection by notifying the flash storage device ahead of time which specific pages in a block may already be erased. The pages with invalid data are marked for deletion, valid data are moved to a free block, and the device is "permitted" to erase the block containing invalid data any time. This allows more blocks to be available for new data to be written in, and the storage device performs faster.

Source: https://www.atpinc.com/blog/how-trim-ssd-works-to-free-storage-space

Garbage Collection Helps SSDs Maintain Fast Read/Write Speeds

The goal of garbage collection is to keep as many empty blocks as possible, so that when the SSD needs to write data, it can do so without waiting for a block to be erased.

The SSD's controller looks for any pages that are no longer useful — pages that the operating system has marked as unnecessary (deleted data, modified data, and the like). It then moves useful pages to new blocks, leaving behind the old, unnecessary pages. The controller then erases the block so that it's ready for use.

Source: https://datarecovery.com/rd/garbage-collection-ssd-simple-explanation/

Specifications

- Capacity: 128GB / 256GB / 512GB / 1TB / 2TB
- Controller: SMI
- NAND Flash: 3D TLC
- Interface: SATA 6Gb/s (SATA III)
- Form Factor: 2.5"
- MTBF: 2,000,000 hours
- Dimensions (L x W x H): 100.45 x 69.85 x 7mm

- Weight: 47.5g
- Operating temperature: 0°C-70°C
- Storage temperature: -40°C-85°C
- Shock resistance: 1500G/0.5ms
- Error correction: advanced hardware LDPC engine
- Certifications: RoHS, CE, FCC, BSMI, VCCI, KC
- Warranty: 3-year limited*

*As of 2020.07.01, the limited warranty period has been extended to 5-year, before 2020.06.30 will retain 3-year for the TW region.

Source: https://webapi3.adata.com/storage/downloadfile/datasheet_su800_en_20210225.pdf, Page 2

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	Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Defendant.
[7.4] erasing the pre-overwrite data stored in the one data sector; and	Defendant performs and induces others to perform erasing the pre-overwrite data stored in the one data sector. This element is infringed literally, or in the alternative, under the doctrine of equivalents. For example, Defendant's ADATA SU800 SSD uses Garbage Collection along with TRIM command and after the copying process, erases all the valid data ("pre-overwrite data") along with the invalid data to free up the space for writing new data. **Features** • 3D NAND Flash • SMI Controller • Wide capacity range: 128GB to 2TB • Advanced hardware LDPC ECC Technology • Intelligent SLC Caching and DRAM cache buffer • DEVSLP (Device Sleep) support • High TBW for extended drive longevity • Supports S.M.A.R.T., TRIM Command, and NCQ • Free software: SSD Toolbox and Migration Utility

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TRIM & Deallocation Commands

Flash storage devices typically cannot detect which pages contain data marked for deletion, causing them to erase and rewrite entire blocks during the garbage collection process. This results in blocks keeping invalid data for a long time instead of being erased sooner to be used for new writes. As more files are written on the flash storage device and there are fewer spare blocks to move data into, the device will have to wait for blocks to be erased before it can accept new data. This causes performance bottlenecks and the device slows down.

The TRIM command is an Advanced Technology Attachment (ATA) command available for flash storage devices using the Serial ATA (SATA) interface. For NVMe modules using the PCIe interface, the equivalent command is "Deallocate." TRIM and Deallocate complement garbage collection by notifying the flash storage device ahead of time which specific pages in a block may already be erased. The pages with invalid data are marked for deletion, valid data are moved to a free block, and the device is "permitted" to erase the block containing invalid data any time. This allows more blocks to be available for new data to be written in, and the storage device performs faster.

Source: https://www.atpinc.com/blog/how-trim-ssd-works-to-free-storage-space

	## Garbage Collection Helps SSDs Maintain Fast Read/Write Speeds The goal of garbage collection is to keep as many empty blocks as possible, so that when the SSD needs to write data, it can do so without waiting for a block to be erased. The SSD's controller looks for any pages that are no longer useful — pages that the operating system has marked as unnecessary (deleted data, modified data, and the like). It then moves useful pages to new blocks, leaving behind the old, unnecessary pages. The controller then erases the block so that it's ready for use. Source: https://datarecovery.com/rd/garbage-collection-ssd-simple-explanation/ Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Defendant.
[7.5] writing the post-overwrite data in the one data sector where the pre-overwrite data was stored together with an error detection code for the post-overwrite data.	Defendant performs and induces others to perform writing the post-overwrite data in the one data sector where the pre-overwrite data was stored together with an error detection code for the post-overwrite data. This element is infringed literally, or in the alternative, under the doctrine of equivalents. For example, Defendant's ADATA SU800 SSD writes a new data along with the error correction code to the erased memory block ("data sector").

Features

- 3D NAND Flash
- SMI Controller
- Wide capacity range: 128GB to 2TB
- Advanced hardware LDPC ECC Technology
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- DEVSLP (Device Sleep) support
- High TBW for extended drive longevity
- Supports S.M.A.R.T., TRIM Command, and NCQ
- Free software: SSD Toolbox and Migration Utility

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TRIM & Deallocation Commands

Flash storage devices typically cannot detect which pages contain data marked for deletion, causing them to erase and rewrite entire blocks during the garbage collection process. This results in blocks keeping invalid data for a long time instead of being erased sooner to be used for new writes. As more files are written on the flash storage device and there are fewer spare blocks to move data into, the device will have to wait for blocks to be erased before it can accept new data. This causes performance bottlenecks and the device slows down.

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Source: https://www.atpinc.com/blog/how-trim-ssd-works-to-free-storage-space

Garbage Collection Helps SSDs Maintain Fast Read/Write Speeds

The goal of garbage collection is to keep as many empty blocks as possible, so that when the SSD needs to write data, it can do so without waiting for a block to be erased.

The SSD's controller looks for any pages that are no longer useful — pages that the operating system has marked as unnecessary (deleted data, modified data, and the like). It then moves useful pages to new blocks, leaving behind the old, unnecessary pages. The controller then erases the block so that it's ready for use.

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Specifications

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- Certifications: RoHS, CE, FCC, BSMI, VCCI, KC
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*As of 2020.07.01, the limited warranty period has been extended to 5-year, before 2020.06.30 will retain 3-year for the TW region.

Source: https://webapi3.adata.com/storage/downloadfile/datasheet_su800_en_20210225.pdf, Page 2

Further, to the extent this element is performed at least in part by Defendant's

	software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Defendant.

1. List of References

1. ADATA SU800 SSD Description, https://www.adata.com/il/specification/410?tab=description, last accessed on April 01, 2021.
2. ADATA SU800 SSD Datasheet, https://webapi3.adata.com/storage/downloadfile/datasheet_su800_en_20210225.pdf, last accessed on April 01, 2021.
3. How TRIM works with Garbage Collection, https://www.atpinc.com/blog/how-trim-ssd-works-to-free-storage-space, last accessed on April 01, 2021.
4. What is Garbage Collection, https://datarecovery.com/rd/garbage-collection-ssd-simple-explanation/, last accessed on April 01, 2021